ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0721-4255
Cates Bldg. / 696 Manors @ Lexington

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E16033630 thru E16033654

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

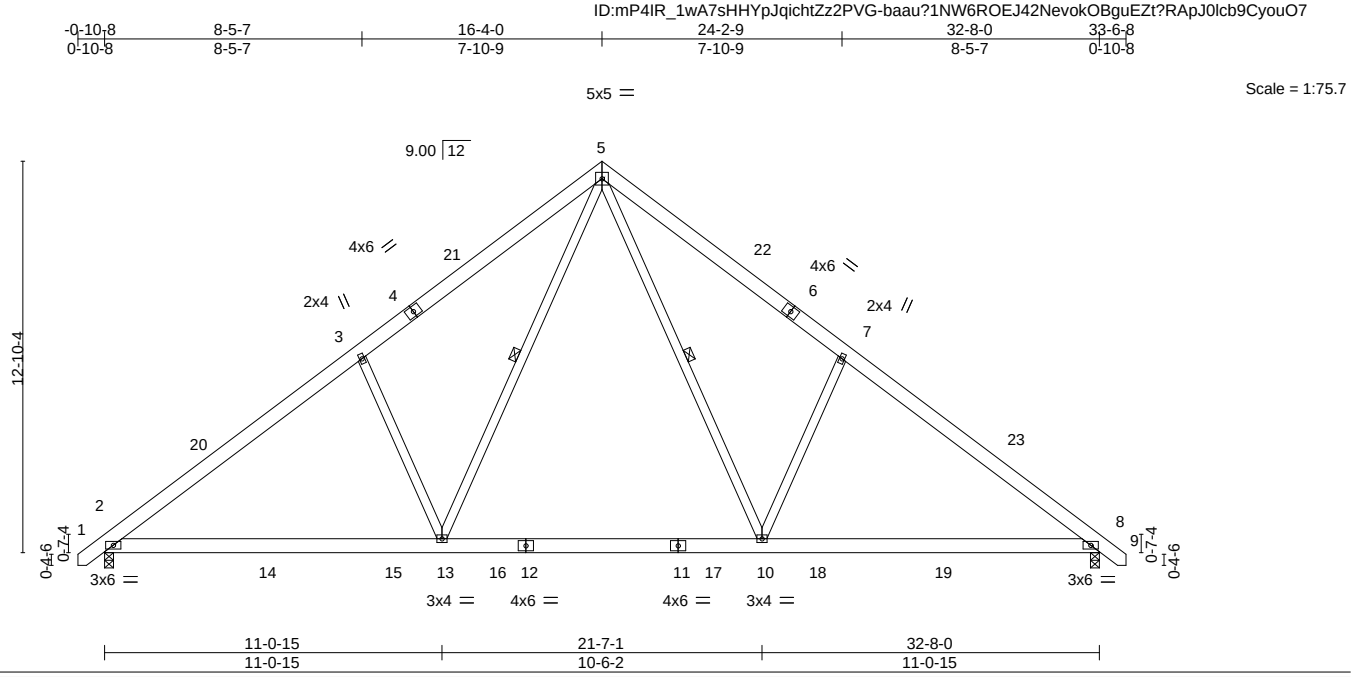
August 11,2021

Gilbert, Eric

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	A1	FINK	3	1	E16033630
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:42 2021 Page 1
ID:mP4IR_1wA7sHHYpJqichtZz2PVG-baau?1NW6ROEJ42NevokOBguEZt?RApJ0lcb9CyouO7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.15	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.23	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-13	>999	240	Weight: 236 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13, 5-10

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-307(LC 10)
Max Uplift 2=-75(LC 12), 8=-75(LC 13)
Max Grav 2=1590(LC 19), 8=1590(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2065/372, 3-5=-1960/513, 5-7=-1961/513, 7-8=-2066/372
BOT CHORD 2-13=-128/1773, 10-13=0/1151, 8-10=-136/1593
WEBS 3-13=-574/350, 5-13=-210/1090, 5-10=-210/1091, 7-10=-574/350

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-13 to 3-7-15, Interior(1) 3-7-15 to 16-4-0, Exterior(2) 16-4-0 to 20-8-13, Interior(1) 20-8-13 to 33-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

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Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	A1GE	GABLE	1	1	E16033631
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:45 2021 Page 1
ID:mP4IR_1wA7sHHYpJqichtZz2PVG-?9F1d3POOMnpAXnyJ2LR0qITYm0Eec4mjjqGmXyouO4

-0-10-8 14-1-5 18-6-11 32-8-0 33-6-8
0-10-8 14-1-5 4-5-5 14-1-5 0-10-8

Scale = 1:70.0

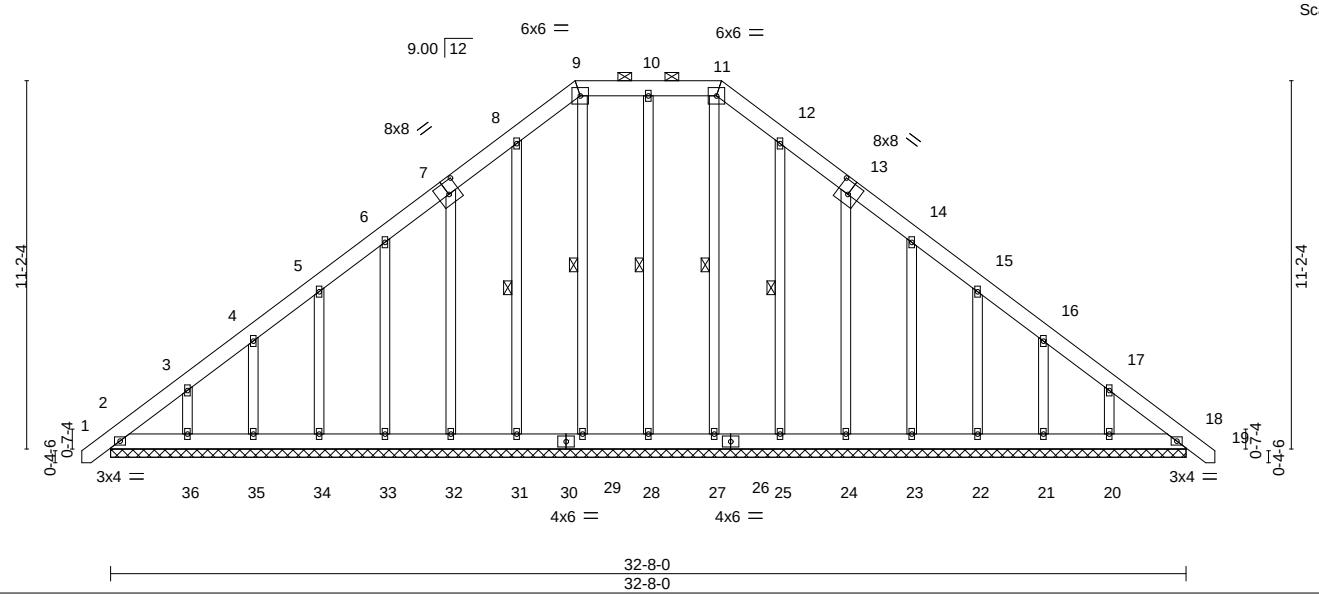

Plate Offsets (X,Y)-- [7:0-4-0,0-4-8], [13:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 314 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 9-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-28, 9-29, 8-31, 11-27, 12-25

REACTIONS. All bearings 32-8-0.
(lb) - Max Horz 2=-335(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 28, 29, 31, 33, 34, 35, 25, 23, 22, 21, 18 except 2=-103(LC 8), 32=-108(LC 12), 36=-126(LC 12), 24=-110(LC 13), 20=-123(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 28, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-332/272, 7-8=-226/274, 8-9=-280/323, 9-10=-248/294, 10-11=-248/294, 11-12=-280/323, 12-13=-226/256
BOT CHORD 2-36=-157/250, 35-36=-157/250, 34-35=-157/250, 33-34=-157/250, 32-33=-157/250, 31-32=-161/252, 29-31=-161/252, 28-29=-160/250, 27-28=-160/250, 25-27=-161/252, 24-25=-161/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-13 to 3-7-15, Exterior(2) 3-7-15 to 14-2-4, Corner(3) 14-2-4 to 22-10-9, Exterior(2) 22-10-9 to 33-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 29, 31, 33, 34, 35, 25, 23, 22, 21, 18 except (jt=lb) 2=103, 32=108, 36=126, 24=110, 20=123.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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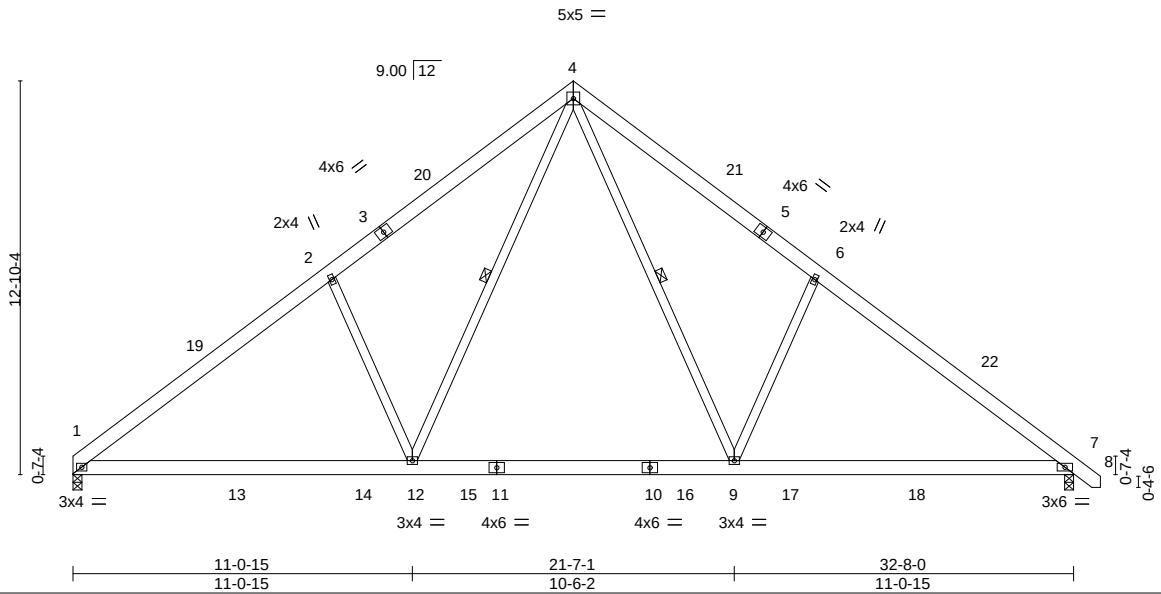
Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	A2	FINK	1	1	E16033632
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:46 2021 Page 1
ID:mP4IR_1wA7sHHYpJqichtZz2PVG-TLpPrPQ19gvgohM8tlsgY1ra7ADtN_mvxNapI_youO3

8-5-7	16-4-0	24-2-9	32-8-0	33-6-8
8-5-7	7-10-9	7-10-9	8-5-7	0-10-8

Scale = 1:75.2



11-0-15	21-7-1	32-8-0
11-0-15	10-6-2	11-0-15

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.15	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.23	1-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	7-9	>999	240	Weight: 233 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-1-2 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-12, 4-9

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-303(LC 8)
Max Uplift 1=-62(LC 12), 7=-75(LC 13)
Max Grav 1=1540(LC 19), 7=1590(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2068/379, 2-4=-1964/522, 4-6=-1961/513, 6-7=-2066/373
BOT CHORD 1-12=-140/1777, 9-12=0/1152, 7-9=-139/1594
WEBS 2-12=-576/355, 4-12=-212/1094, 4-9=-211/1090, 6-9=-575/350

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 16-4-0, Exterior(2) 16-4-0 to 20-8-13, Interior(1) 20-8-13 to 33-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

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Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	A3	FINK	7	1	E16033633
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:46 2021 Page 1
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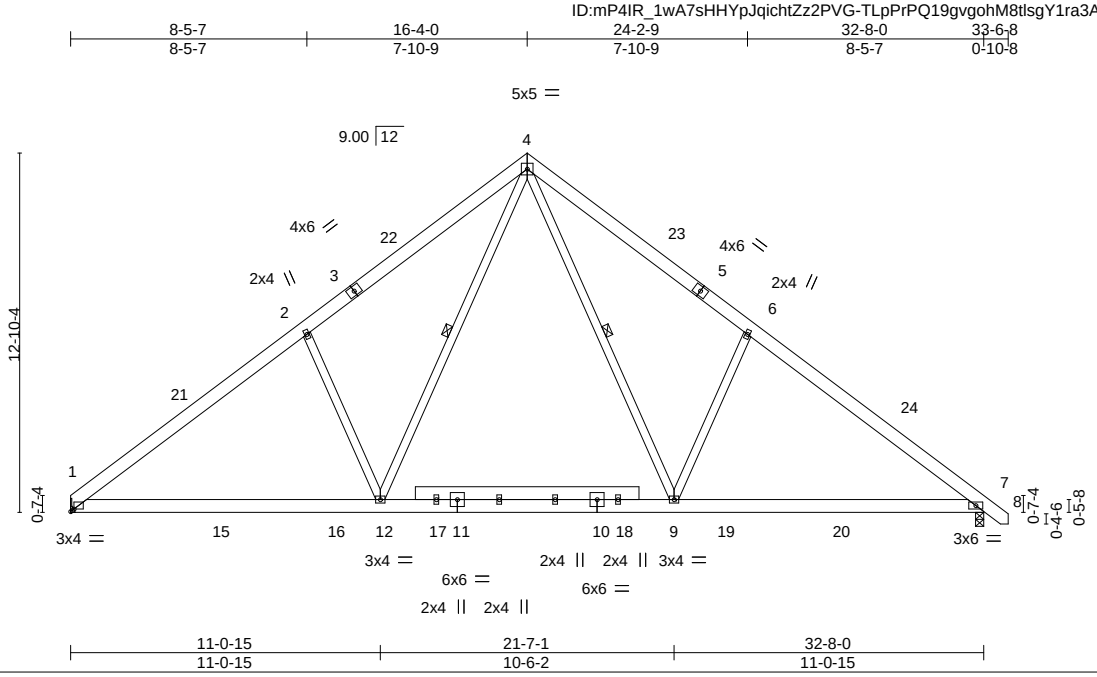

Plate Offsets (X,Y)-- [1:0-1-7,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.14	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.24	1-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	7-9	>999	240	Weight: 252 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12, 4-9

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-303(LC 8)
Max Uplift 1=-63(LC 12), 7=-75(LC 13)
Max Grav 1=1533(LC 19), 7=1584(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2062/380, 2-4=-1958/524, 4-6=-1950/514, 6-7=-2055/374
BOT CHORD 1-12=-142/1776, 9-12=0/1147, 7-9=-139/1585
WEBS 2-12=-584/357, 4-12=-213/1094, 4-9=-211/1079, 6-9=-575/350

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 16-4-0, Exterior(2) 16-4-0 to 20-8-13, Interior(1) 20-8-13 to 33-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

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Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	A3A	FINK	3	1	E16033634
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:47 2021 Page 1
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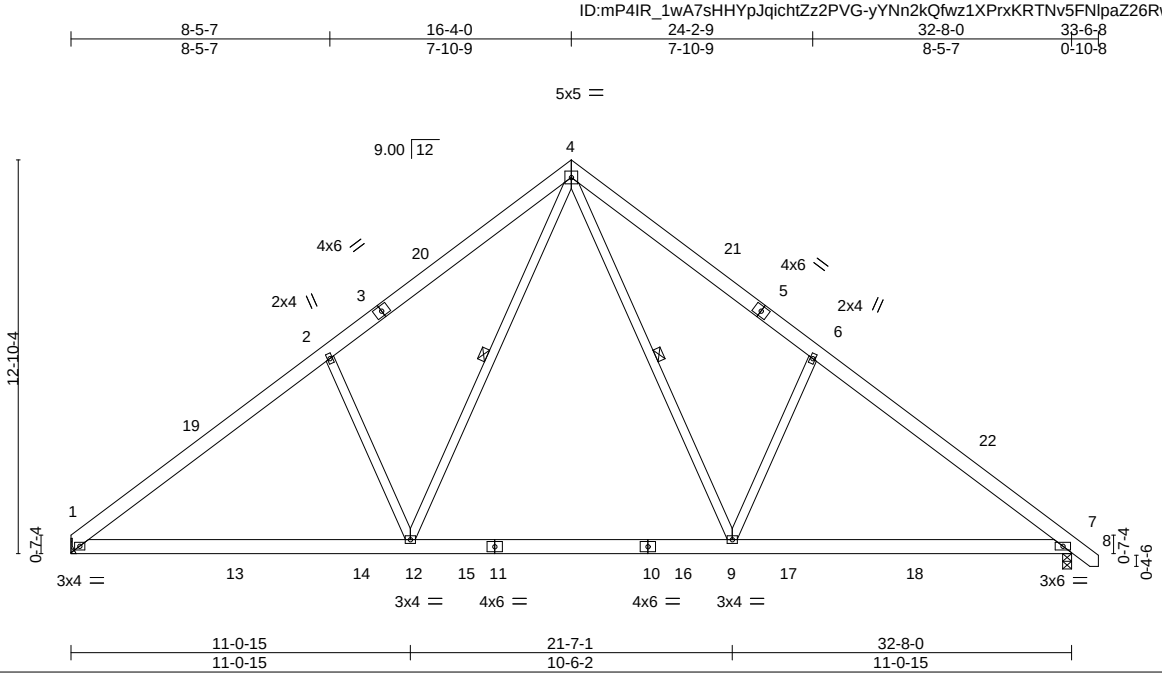

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.15	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.24	1-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	7-9	>999	240	Weight: 233 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12, 4-9

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-303(LC 8)
Max Uplift 1=-63(LC 12), 7=-75(LC 13)
Max Grav 1=1542(LC 19), 7=1593(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2078/380, 2-4=-1974/524, 4-6=-1966/514, 6-7=-2071/374
BOT CHORD 1-12=-142/1788, 9-12=0/1156, 7-9=-139/1598
WEBS 2-12=-584/357, 4-12=-213/1105, 4-9=-211/1090, 6-9=-575/350

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 16-4-0, Exterior(2) 16-4-0 to 20-8-13, Interior(1) 20-8-13 to 33-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

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Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	A3GE	GABLE	1	1	E16033635
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:49 2021 Page 1
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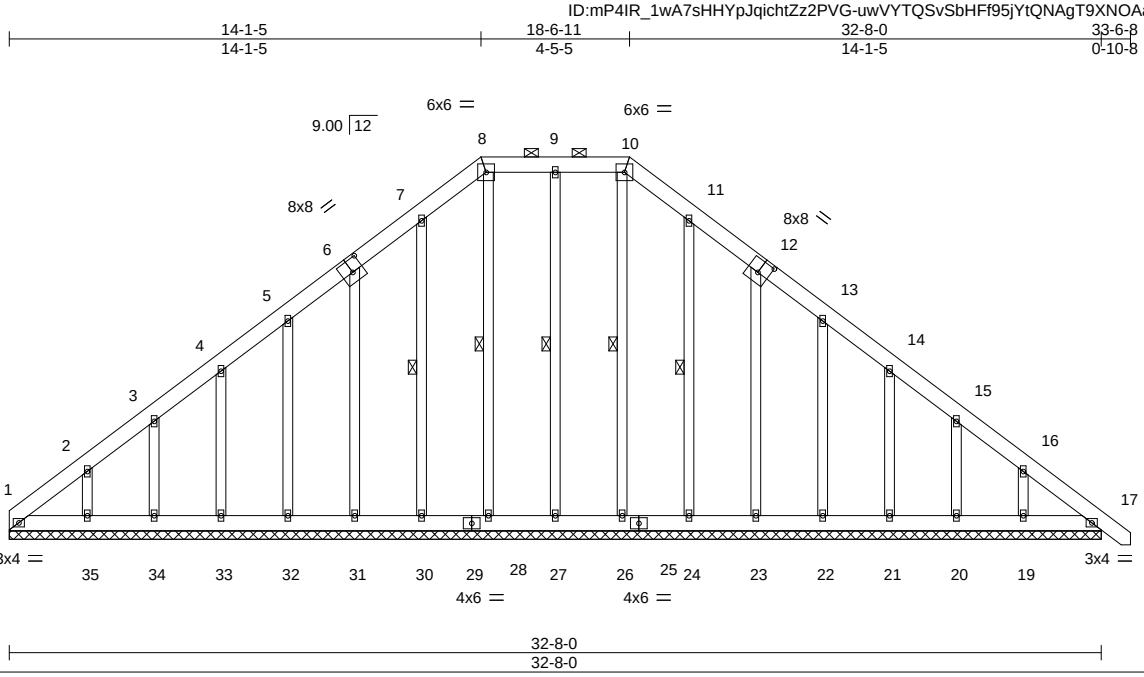

Plate Offsets (X,Y)-- [6:0-4-0,0-4-8], [12:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	17	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	17	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 311 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-27, 8-28, 7-30, 10-26, 11-24

REACTIONS. All bearings 32-8-0.
(lb) - Max Horz 1=-331(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 27, 28, 30, 32, 34, 24, 22, 21, 20, 17 except 1=-107(LC 10), 31=-108(LC 12), 33=-100(LC 12), 35=-134(LC 12), 23=-110(LC 13), 19=-123(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 27, 28, 30, 31, 32, 33, 34, 35, 26, 24, 23, 22, 21, 20, 19, 17

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-336/275, 6-7=-226/274, 7-8=-280/323, 8-9=-248/294, 9-10=-248/294, 10-11=-280/323, 11-12=-226/257
BOT CHORD 1-35=-157/250, 34-35=-157/250, 33-34=-157/250, 32-33=-157/250, 31-32=-157/250, 30-31=-161/252, 28-30=-161/252, 27-28=-160/250, 26-27=-160/250, 24-26=-161/252, 23-24=-161/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 4-4-0, Exterior(2) 4-4-0 to 14-2-4, Corner(3) 14-2-4 to 22-10-9, Exterior(2) 22-10-9 to 33-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 28, 30, 32, 34, 24, 22, 21, 20, 17 except (jt=lb) 1=107, 31=108, 33=100, 35=134, 23=110, 19=123.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

August 11,2021

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	B1	COMMON	1	1	E16033636
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:50 2021 Page 1
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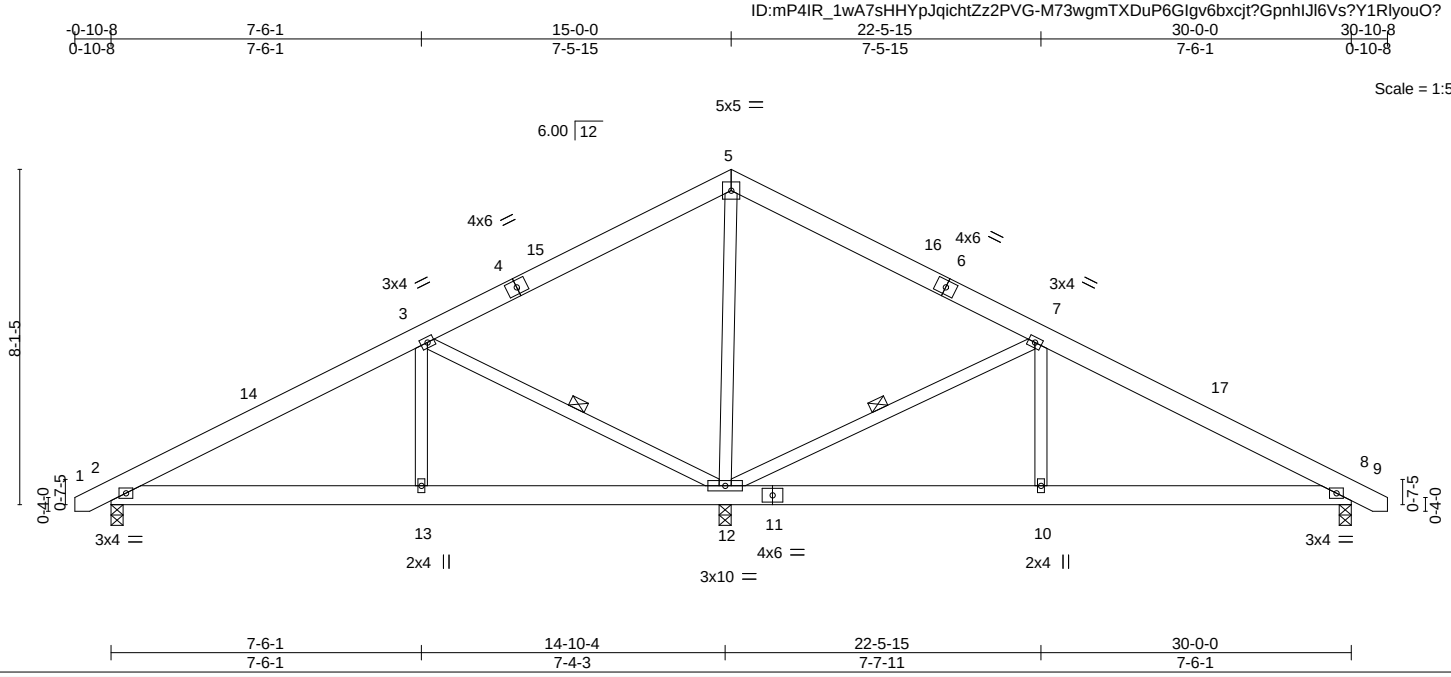

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.02	2-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.05	2-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	8-10	>999	240	Weight: 198 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-12, 3-12

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 8=0-3-8
Max Horz 2=102(LC 11)
Max Uplift 2=-52(LC 12), 12=-103(LC 9), 8=-152(LC 8)
Max Grav 2=503(LC 23), 12=1542(LC 1), 8=516(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-550/64, 3-5=-117/447, 5-7=-113/432, 7-8=-579/458
BOT CHORD 2-13=-69/412, 12-13=-69/412, 10-12=-305/437, 8-10=-305/437
WEBS 5-12=-710/281, 7-12=-754/698, 7-10=-316/325, 3-12=-742/228, 3-13=0/316

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-0-0, Exterior(2) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-6 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=103, 8=152.

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A MiTek Affiliate
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	B1GE	GABLE	1	1	E16033637
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:51 2021 Page 1
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-0-10-8 7-6-1 15-0-0 22-5-15 30-0-0 30-10-8
0-10-8 7-6-1 7-5-15 7-5-15 7-6-1 0-10-8

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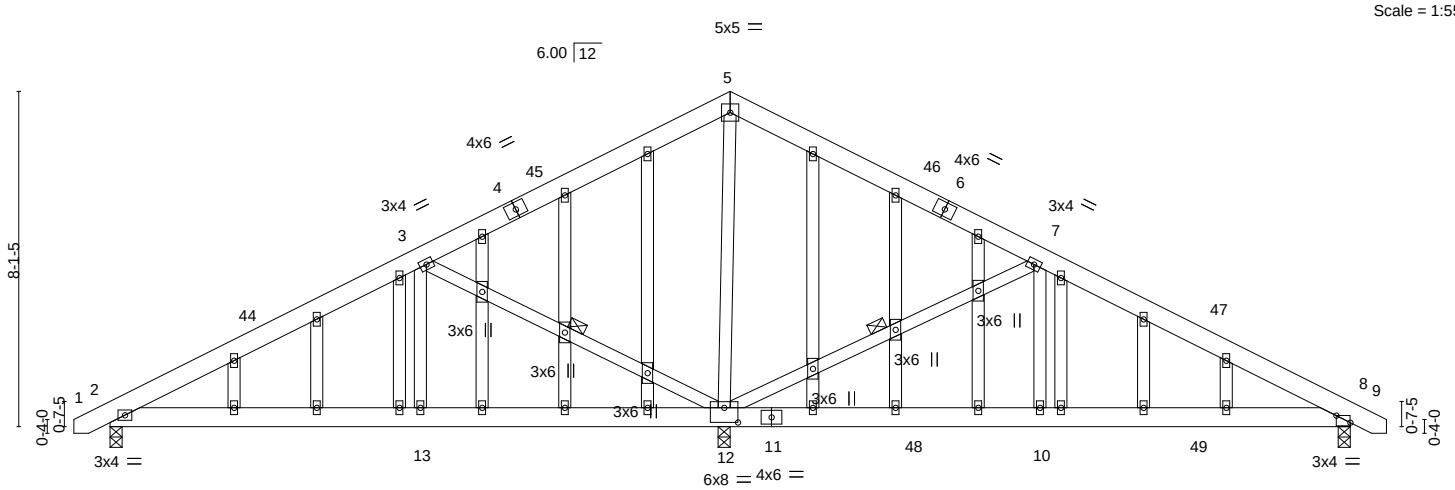

7-6-1 14-10-4 22-5-15 30-0-0
7-6-1 7-4-3 7-7-11 7-6-1

Plate Offsets (X,Y)-- [8:0-4-1,Edge], [12:0-4-0,0-4-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.05	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.05	2-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 263 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-12, 3-12

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 8=0-3-8
Max Horz 2=-159(LC 13)
Max Uplift 2=-132(LC 12), 12=-269(LC 12), 8=-185(LC 8)
Max Grav 2=503(LC 23), 12=1542(LC 1), 8=516(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-550/123, 3-5=-153/447, 5-7=-145/432, 7-8=-579/549
BOT CHORD 2-13=-159/412, 12-13=-159/412, 10-12=-337/437, 8-10=-337/437
WEBS 5-12=-710/444, 7-12=-754/883, 7-10=-307/325, 3-12=-742/436, 3-13=0/316

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-6 to 3-8-7, Exterior(2) 3-8-7 to 15-0-0, Corner(3) 15-0-0 to 19-4-13, Exterior(2) 19-4-13 to 30-8-6 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=132, 12=269, 8=185.

August 11,2021

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	B2	ROOF SPECIAL	3	1	E16033638
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:52 2021 Page 1
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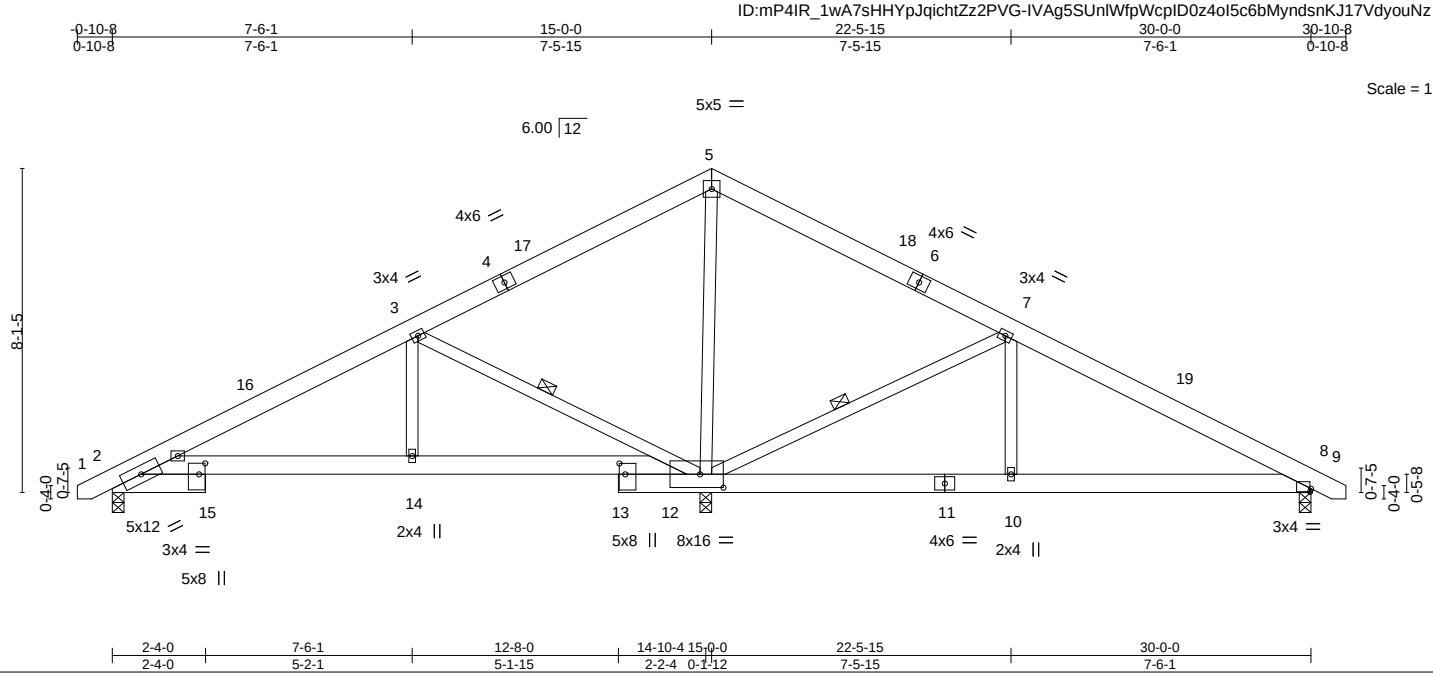

Plate Offsets (X,Y)-- [8:0-0-5,0-0-15], [12:0-7-0,0-4-0], [13:0-3-4,0-1-12], [15:0-3-5,0-1-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.05	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.05	2-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 206 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 7-12

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 8=0-3-8
Max Horz 2=-107(LC 10)
Max Uplift 2=-42(LC 12), 12=-96(LC 9), 8=-191(LC 8)
Max Grav 2=395(LC 23), 12=1644(LC 1), 8=540(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-355/86, 3-5=-72/625, 5-7=-45/490, 7-8=-631/588
BOT CHORD 10-12=-414/486, 8-10=-414/483
WEBS 5-12=-826/240, 3-14=0/282, 3-12=-740/195, 7-12=-787/728, 7-10=-314/338

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-0-0, Exterior(2) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-6 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12 except (jt=lb) 8=191.

August 11,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	B3	ROOF SPECIAL	2	1	E16033639
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:52 2021 Page 1
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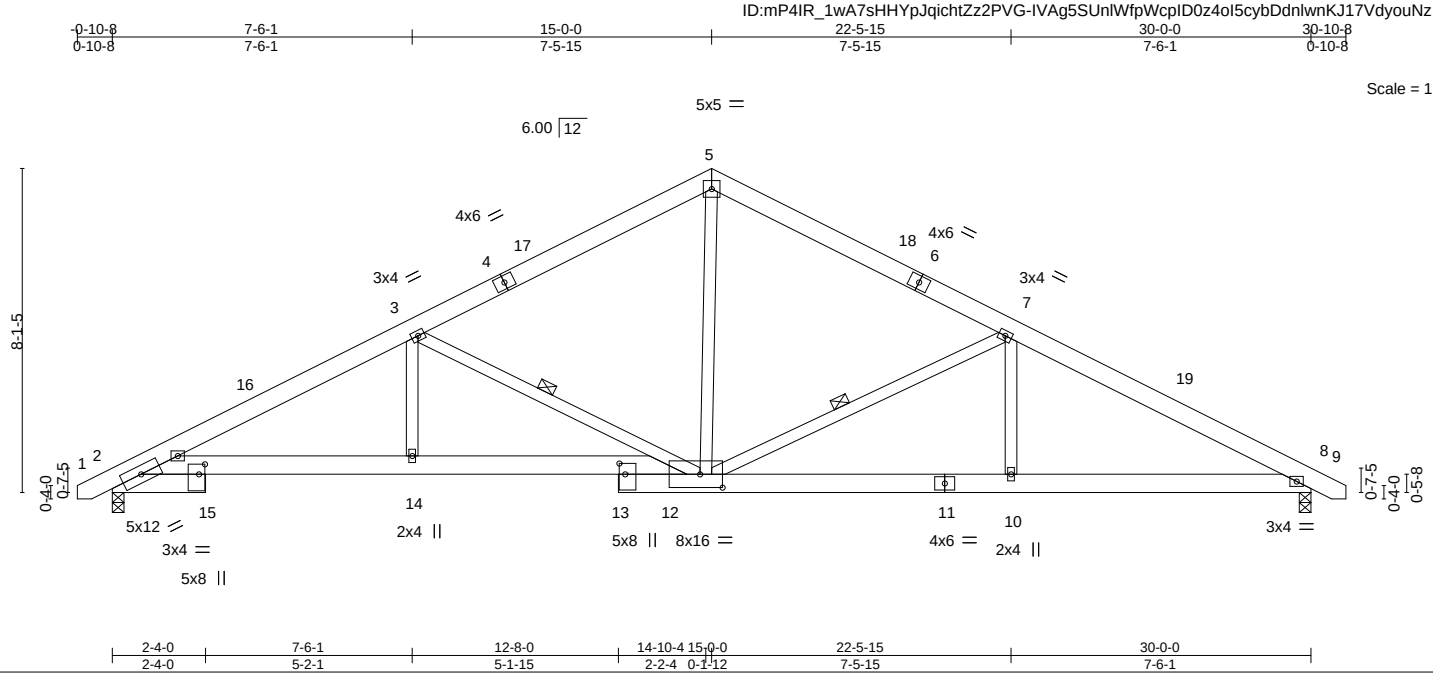

Plate Offsets (X,Y)-- [12:0-6-12,0-4-0], [13:0-3-4,0-1-12], [15:0-3-0,0-1-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.09	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.18	2-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.07	2-14	>999	240	Weight: 206 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-7-12 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-12, 7-12

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-102(LC 10)
Max Uplift 2=-83(LC 12), 8=-83(LC 13)
Max Grav 2=1239(LC 1), 8=1239(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2419/509, 3-5=-1565/414, 5-7=-1429/396, 7-8=-2097/443
BOT CHORD 2-14=-347/2086, 12-14=-345/2086, 10-12=-290/1782, 8-10=-290/1778
WEBS 5-12=-126/840, 3-14=0/446, 3-12=-902/287, 7-12=-691/228, 7-10=0/287

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-0-0, Exterior(2) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

August 11,2021

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	B4	FINK	7	1	E16033640
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:53 2021 Page 1
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-0-10-8	5-8-5	10-9-12	15-0-0	19-2-4	24-3-11	30-0-0	30-10-8
0-10-8	5-8-5	5-1-7	4-2-4	4-2-4	5-1-7	5-8-5	0-10-8

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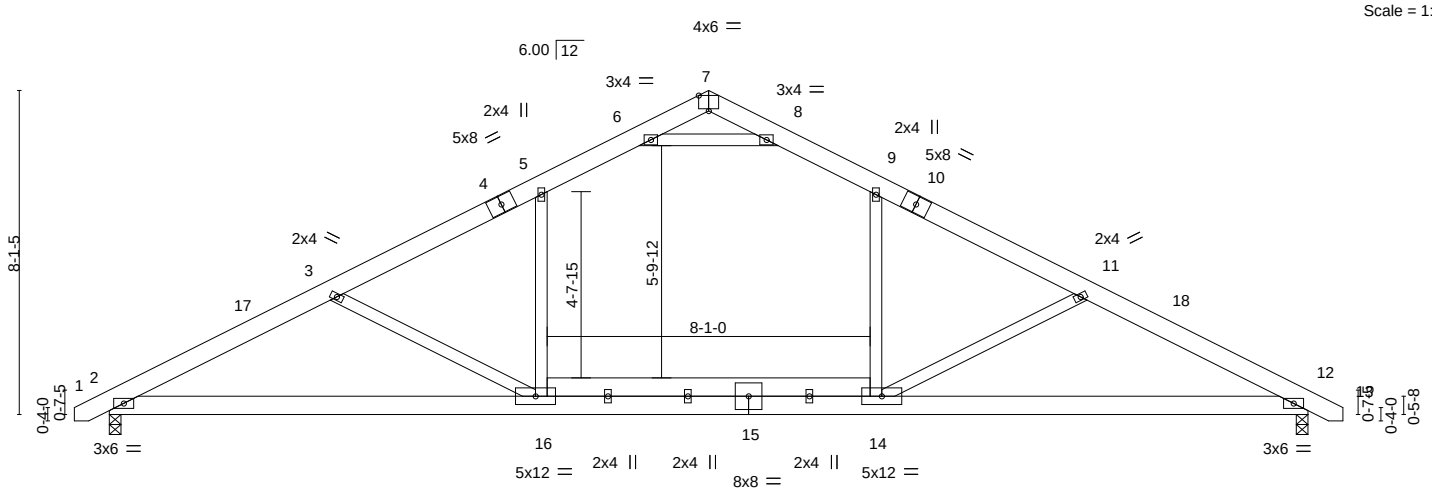


10-9-12	19-2-4	30-0-0
10-9-12	8-4-8	10-9-12

Plate Offsets (X,Y)-- [7:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.24	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.36	2-16	>989	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.14	2-16	>999	240	Weight: 210 lb	FT = 20%

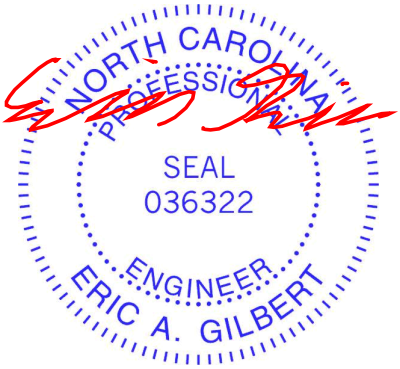
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-102(LC 10)
Max Uplift 2=-83(LC 12), 12=-83(LC 13)
Max Grav 2=1270(LC 2), 12=1270(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2276/515, 3-5=-1902/402, 5-6=-1507/415, 6-7=-116/851, 7-8=-116/851, 8-9=-1507/415, 9-11=-1902/402, 11-12=-2276/515
BOT CHORD 2-16=-360/2026, 14-16=-145/1583, 12-14=-353/1984
WEBS 3-16=-576/243, 5-16=-5/613, 9-14=-5/613, 11-14=-576/243, 6-8=-2531/570

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-0-0, Exterior(2) 15-0-0 to 19-2-4, Interior(1) 19-2-4 to 30-8-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.



August 11,2021

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	C1	HIP GIRDER	1	2	E16033641
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:54 2021 Page 1
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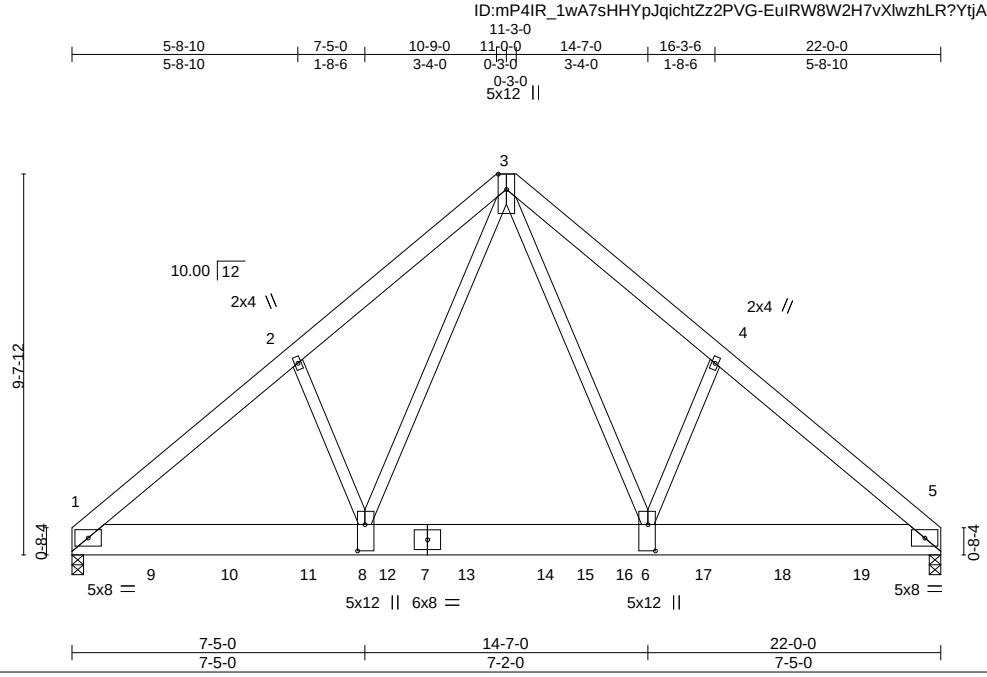

Plate Offsets (X,Y)-- [6:0-8-0,0-2-4], [8:0-8-0,0-2-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.11	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.19	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	6-8	>999	240	Weight: 390 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-220(LC 6)
Max Uplift 1=-413(LC 8), 5=-409(LC 9)
Max Grav 1=8093(LC 2), 5=8043(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9663/527, 2-3=-9505/623, 3-4=-9485/622, 4-5=-9643/525
BOT CHORD 1-8=-414/7295, 6-8=-210/4973, 5-6=-337/7280
WEBS 3-8=-421/6324, 3-6=-418/6282, 2-8=-317/300, 4-6=-317/301

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=413, 5=409.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1450 lb down and 83 lb up at 2-0-12, 1450 lb down and 83 lb up at 3-11-4, 1450 lb down and 83 lb up at 5-11-4, 1450 lb down and 83 lb up at 7-11-4, 1408 lb down and 83 lb up at 9-11-4, 1405 lb down and 83 lb up at 11-11-4, 1450 lb down and 83 lb up at 13-11-4, 1459 lb down and 83 lb up at 15-11-4, and 1459 lb down and 83 lb up at 17-11-4, and 1459 lb down and 83 lb up at 19-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 1-5=-20

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Continued on page 2

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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-1277(F) 10=-1277(F) 11=-1277(F) 12=-1277(F) 13=-1277(F) 14=-1277(F) 16=-1277(F) 17=-1277(F) 18=-1277(F) 19=-1277(F)

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	C1GE	GABLE	1	1	E16033642
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:55 2021 Page 1
ID:mP4IR_1wA7sHHYpJqichtZz2PVG-j4spkUXg2R1ON4Ytv8XnQxj9foP8_7tE0HFn5yyouNw

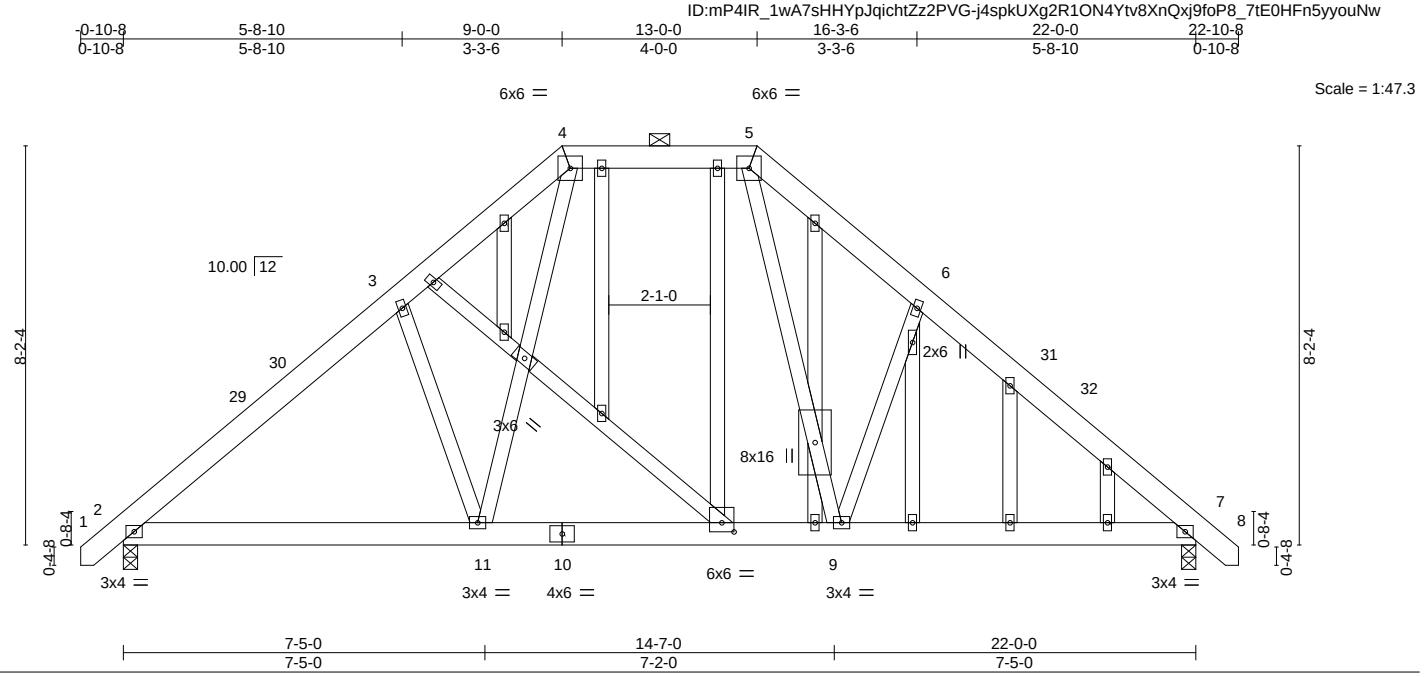

Plate Offsets (X,Y)-- [26:0-3-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.04	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.06	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-11	>999	240	Weight: 213 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-245(LC 10)
Max Uplift 2=-169(LC 12), 7=-169(LC 13)
Max Grav 2=922(LC 1), 7=922(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1099/278, 3-4=-987/388, 4-5=-662/298, 5-6=-987/388, 6-7=-1099/278
BOT CHORD 2-11=-151/762, 9-11=-54/593, 7-9=-83/749
WEBS 4-11=-200/497, 5-9=-200/497, 3-11=-337/322, 6-9=-337/323

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-14 to 3-7-14, Interior(1) 3-7-14 to 9-1-0, Exterior(2) 9-1-0 to 19-1-11, Interior(1) 19-1-11 to 22-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=169, 7=169.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	CJ01	DIAGONAL HIP GIRDER	1	1	E16033643
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:56 2021 Page 1
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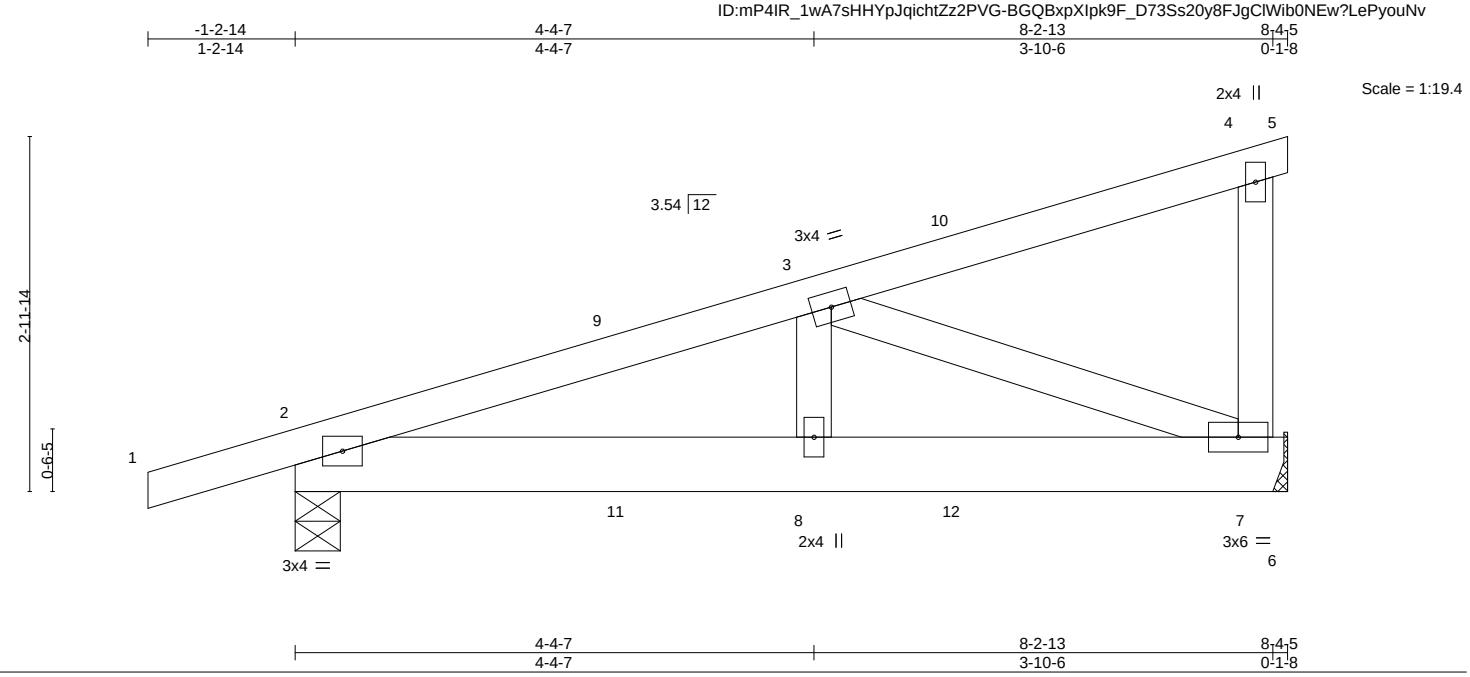

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.01	8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 45 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-4-9, 7=Mechanical
Max Horz 2=95(LC 19)
Max Uplift 2=-180(LC 4), 7=-166(LC 4)
Max Grav 2=426(LC 1), 7=356(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-589/207
BOT CHORD 2-8=-250/522, 7-8=-250/522
WEBS 3-7=-559/268

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=180, 7=166.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 17 lb down and 22 lb up at 2-9-8, 17 lb down and 22 lb up at 2-9-8, and 42 lb down and 60 lb up at 5-7-7, and 42 lb down and 60 lb up at 5-7-7 on top chord, and 2 lb down and 21 lb up at 2-9-8, 2 lb down and 21 lb up at 2-9-8, and 20 lb down and 41 lb up at 5-7-7, and 20 lb down and 41 lb up at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-20, 2-6=-20
Concentrated Loads (lb)
Vert: 10=-36(F=-18, B=-18) 12=-17(F=-9, B=-9)

August 11,2021

ENGINEERING BY
TRENCO
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	D1	COMMON	2	1	E16033644
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:57 2021 Page 1
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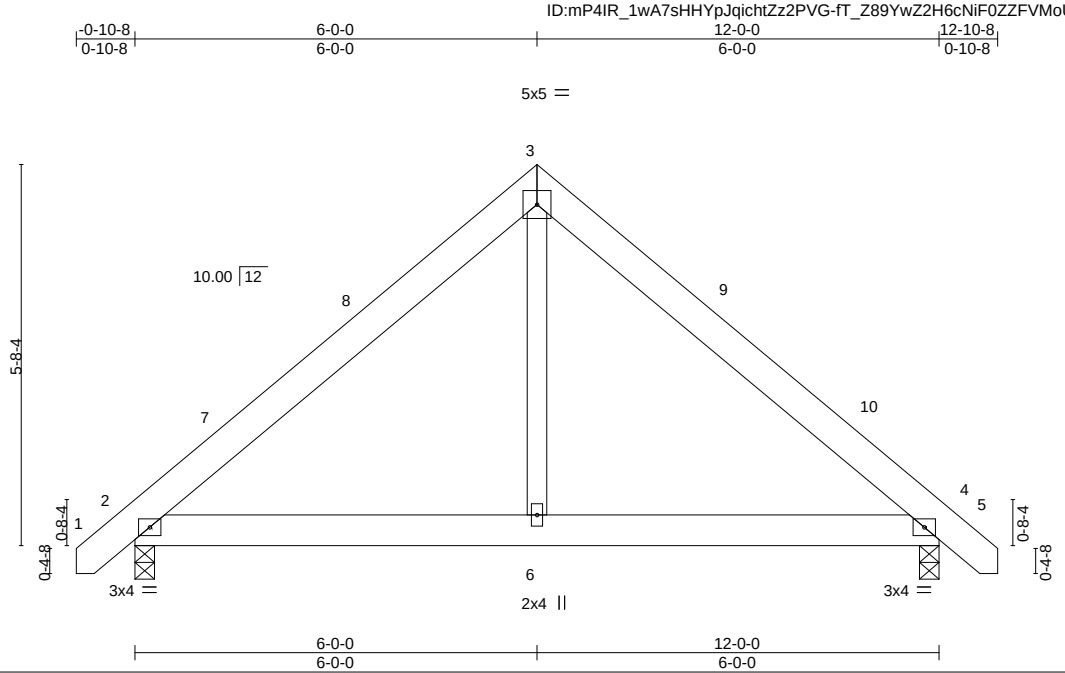

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	4-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.01	2-6	>999	240	Weight: 78 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-135(LC 10)
Max Uplift 2=-32(LC 12), 4=-32(LC 13)
Max Grav 2=522(LC 1), 4=522(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-518/147, 3-4=-518/147
BOT CHORD 2-6=0/323, 4-6=0/323
WEBS 3-6=0/284

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-14, Interior(1) 3-7-14 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

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Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	D1GE	GABLE	1	1	E16033645
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:58 2021 Page 1
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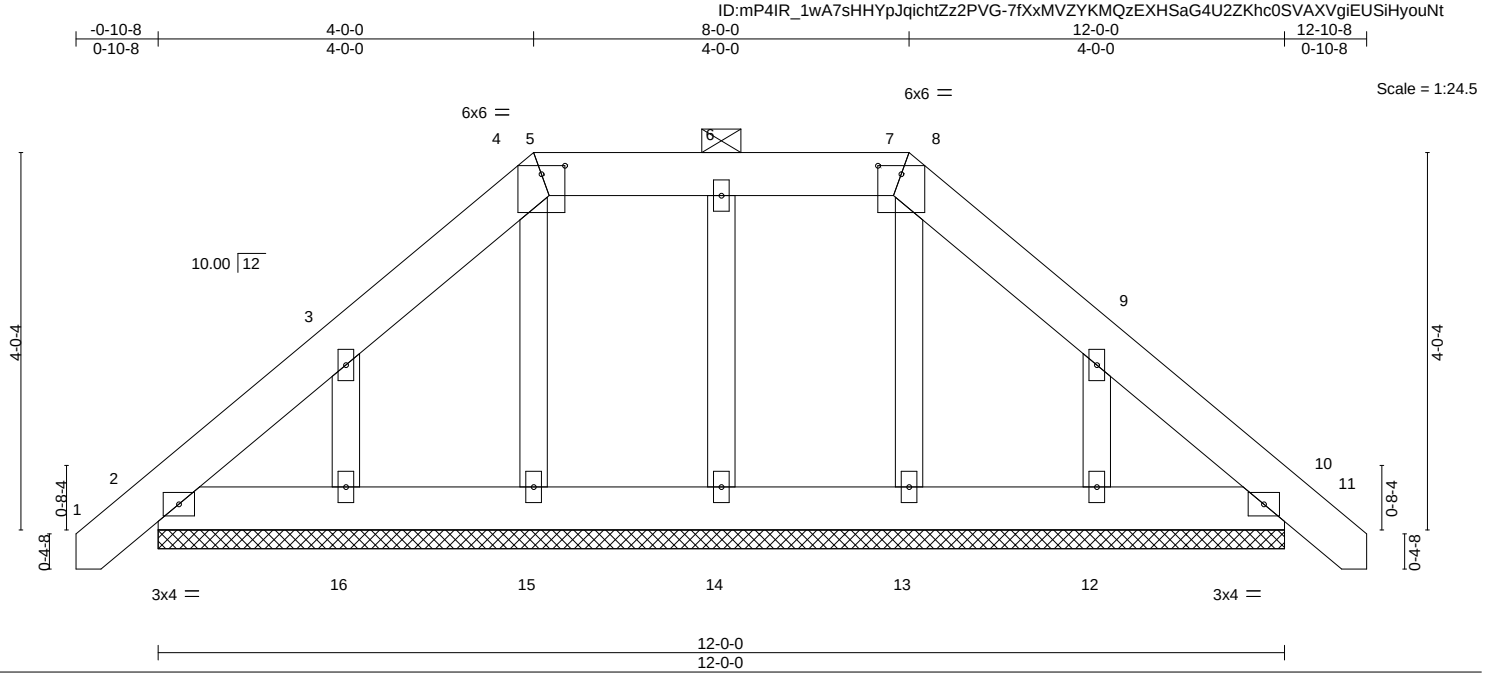

Plate Offsets (X,Y)-- [5:0-3-0,0-1-1], [7:0-3-0,0-1-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 86 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-0-0.
(lb) - Max Horz 2=-120(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 14, 15, 13 except 16=-128(LC 12), 12=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-14 to 3-7-14, Exterior(2) 3-7-14 to 4-1-0, Corner(3) 4-1-0 to 12-3-13, Exterior(2) 12-3-13 to 12-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 14, 15, 13 except (jt=lb) 16=128, 12=126.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	J02	JACK-OPEN	2	1	E16033646
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:58 2021 Page 1
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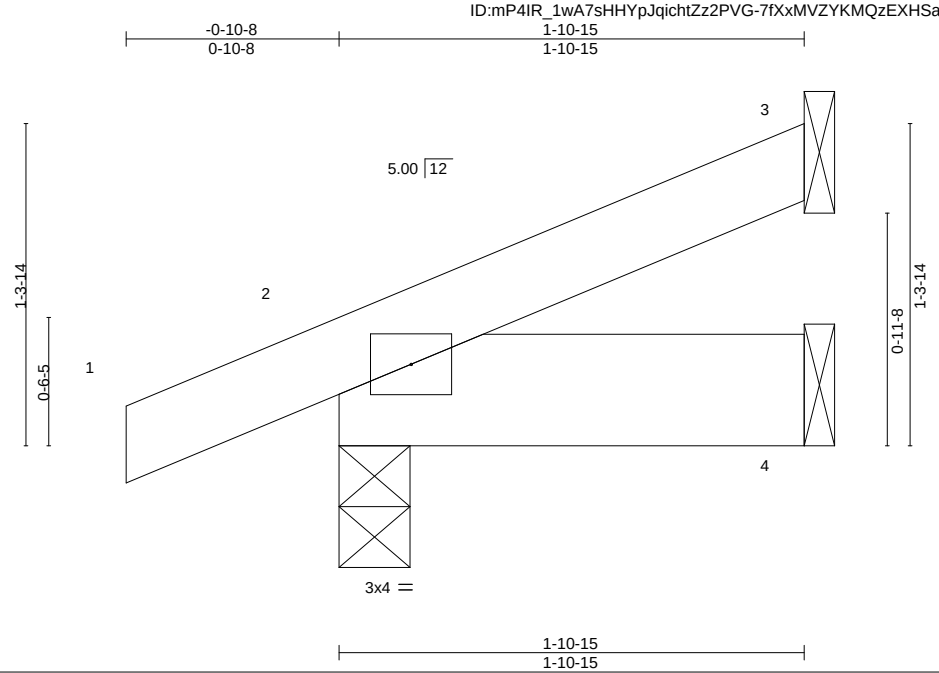

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.00	2	>999	240	Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=36(LC 12)
Max Uplift 3=-23(LC 12), 2=-46(LC 8), 4=-10(LC 8)
Max Grav 3=43(LC 1), 2=142(LC 1), 4=37(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.

August 11,2021

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	J03	JACK-OPEN	2	1	E16033647
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:59 2021 Page 1
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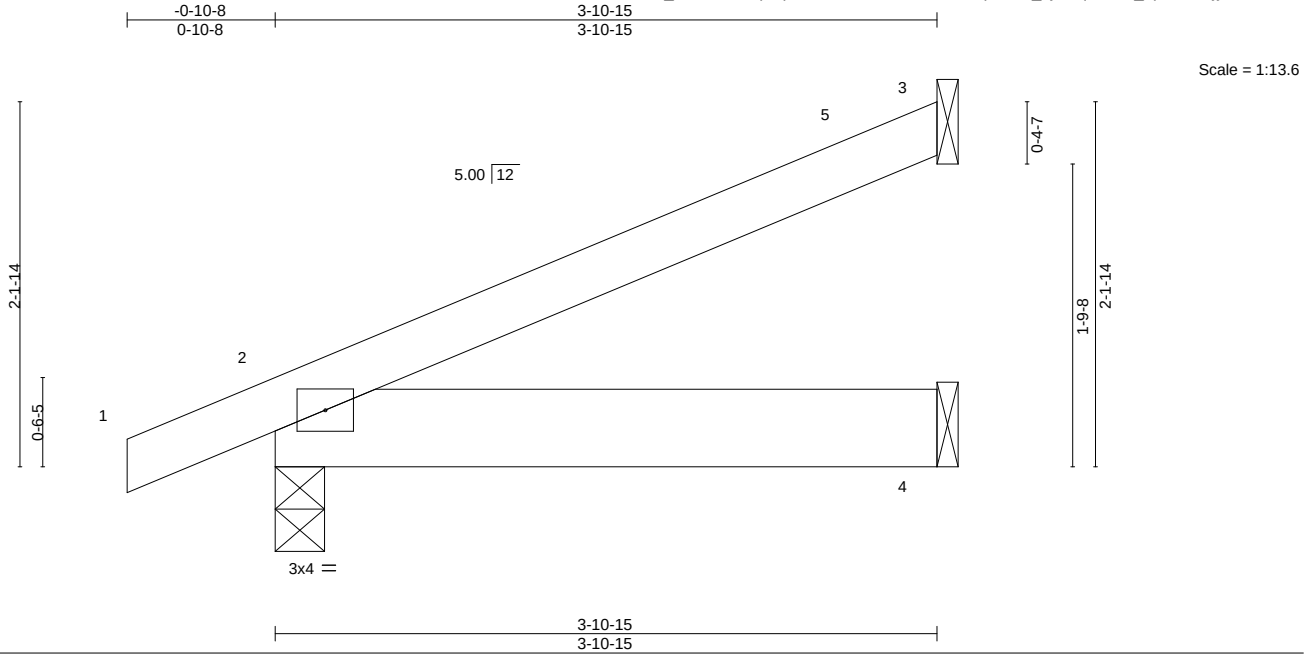

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.01	2-4	>999	240	Weight: 17 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=63(LC 12)
Max Uplift 3=-49(LC 12), 2=-63(LC 8), 4=-19(LC 8)
Max Grav 3=103(LC 1), 2=218(LC 1), 4=74(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 3-10-3 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.

August 11,2021

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	J06	JACK-OPEN	1	1	E16033648
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:41:59 2021 Page 1
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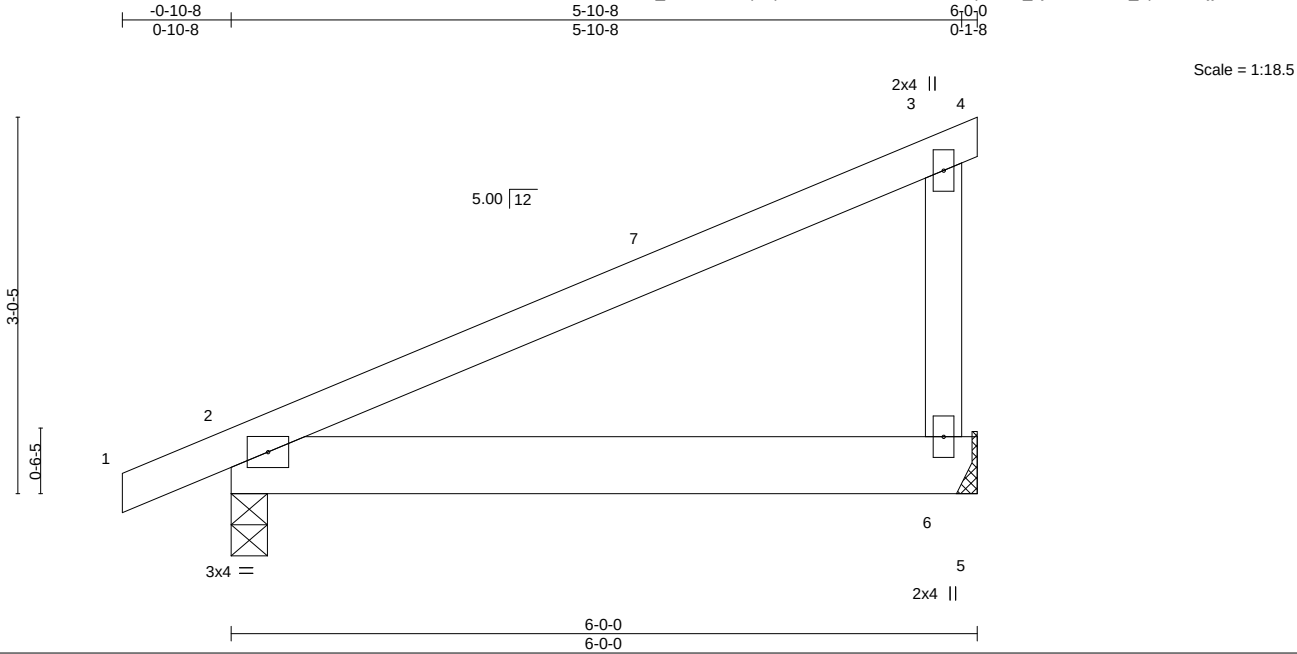

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.03	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.03	2-6	>999	240	Weight: 29 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=91(LC 12)
Max Uplift 2=-78(LC 8), 6=-75(LC 9)
Max Grav 2=290(LC 1), 6=229(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-0-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

August 11,2021

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	M1	MONOPITCH GIRDER	1	1	E16033649
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:42:00 2021 Page 1
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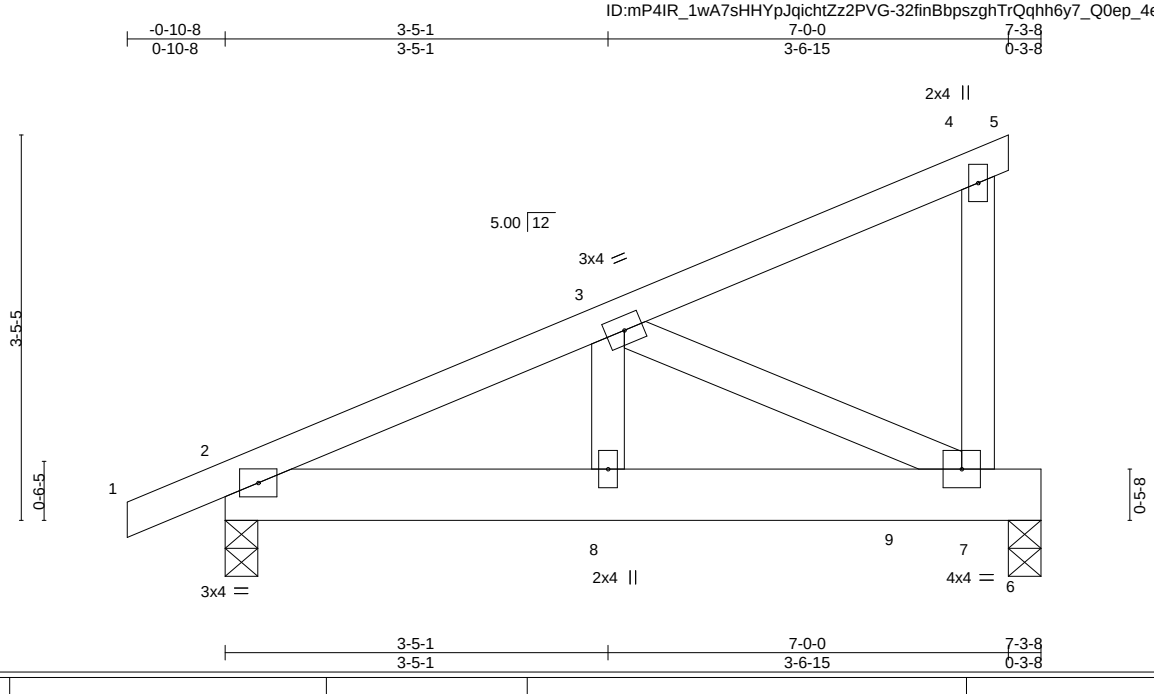

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.02	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.05	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.03	7-8	>999	240	Weight: 40 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=105(LC 8)
Max Uplift 2=-138(LC 4), 6=-342(LC 5)
Max Grav 2=458(LC 1), 6=873(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-784/233
BOT CHORD 2-8=-258/672, 7-8=-258/672
WEBS 3-7=-743/286, 3-8=-178/417

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=138, 6=342.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 730 lb down and 328 lb up at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-20, 2-6=-20
Concentrated Loads (lb)
Vert: 9=-730(B)

August 11,2021

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	M2	MONOPITCH	6	1	E16033650
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:42:01 2021 Page 1
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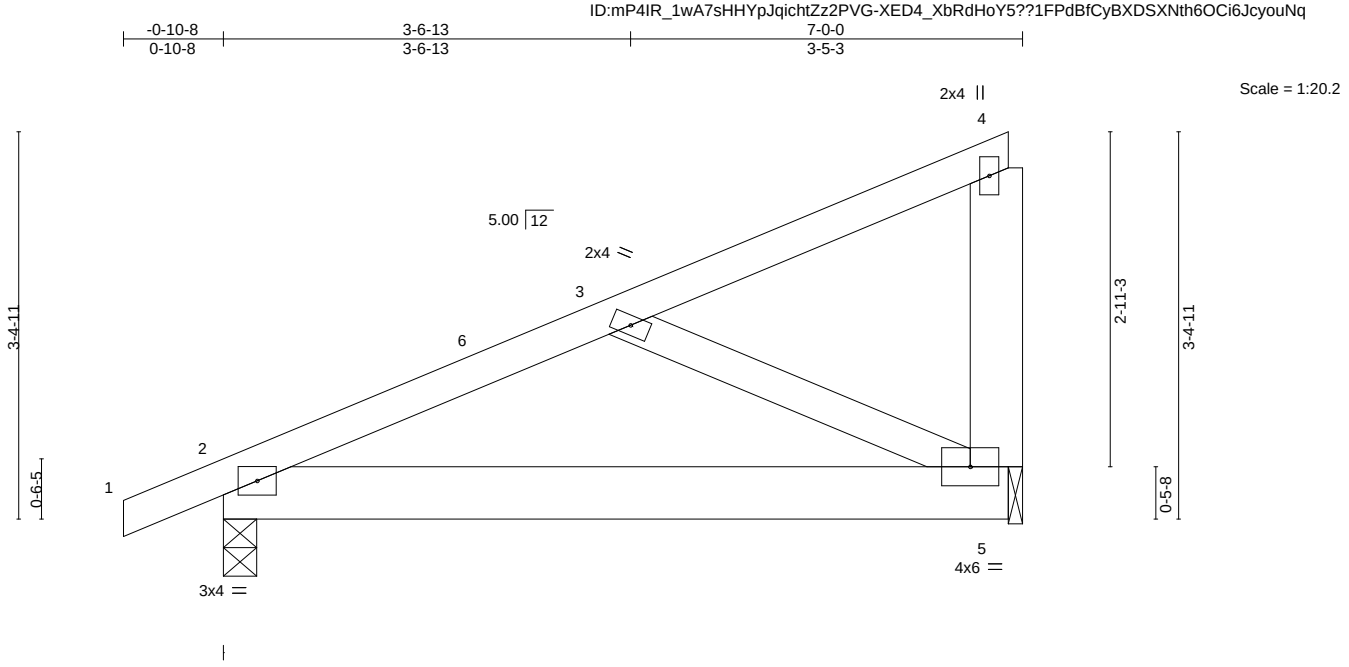

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.03	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.05	2-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.06	2-5	>999	240	Weight: 40 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-5: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-1-8
Max Horz 2=102(LC 12)
Max Uplift 2=-88(LC 8), 5=-90(LC 9)
Max Grav 2=331(LC 1), 5=260(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-310/139
BOT CHORD 2-5=-260/247
WEBS 3-5=-271/286

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-4-8, Interior(1) 3-4-8 to 6-9-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.

August 11,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	M2GE	GABLE	1	1	E16033651
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:42:01 2021 Page 1
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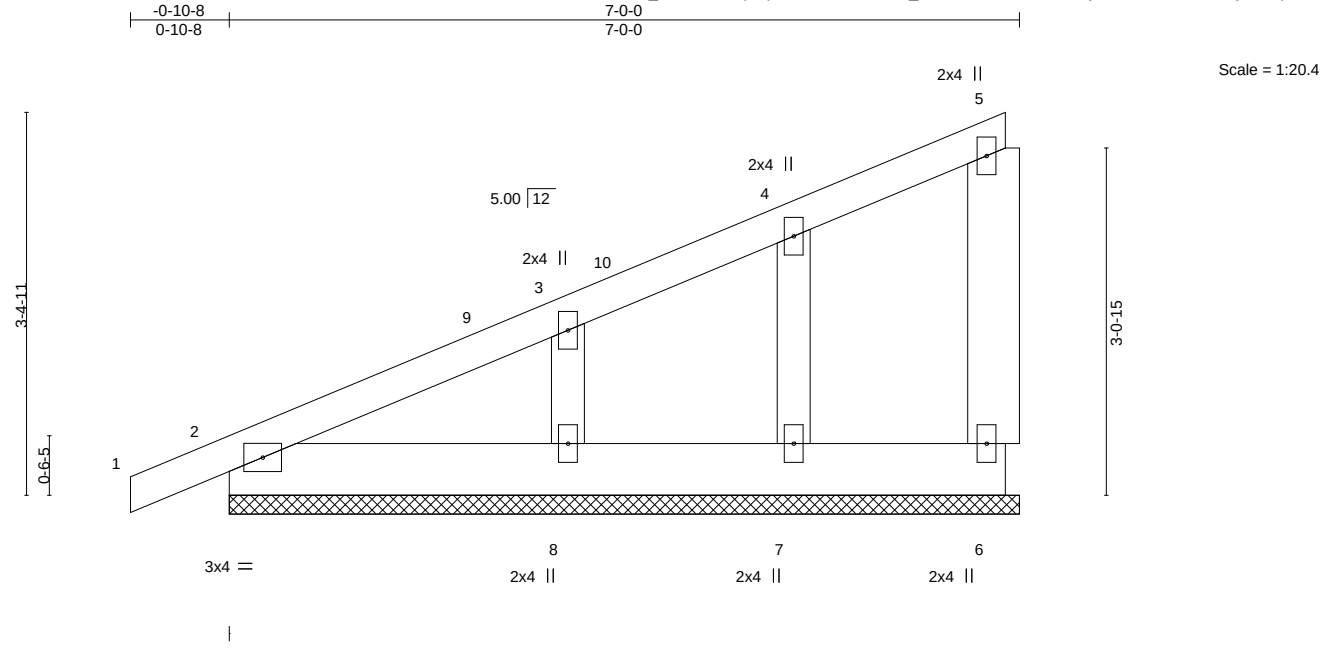

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 39 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 7-0-0.
(lb) - Max Horz 2=148(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7, 8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-8=-170/288

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 6-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7, 8.

August 11,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	M3	HALF HIP GIRDER	1	1	E16033652
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:42:02 2021 Page 1
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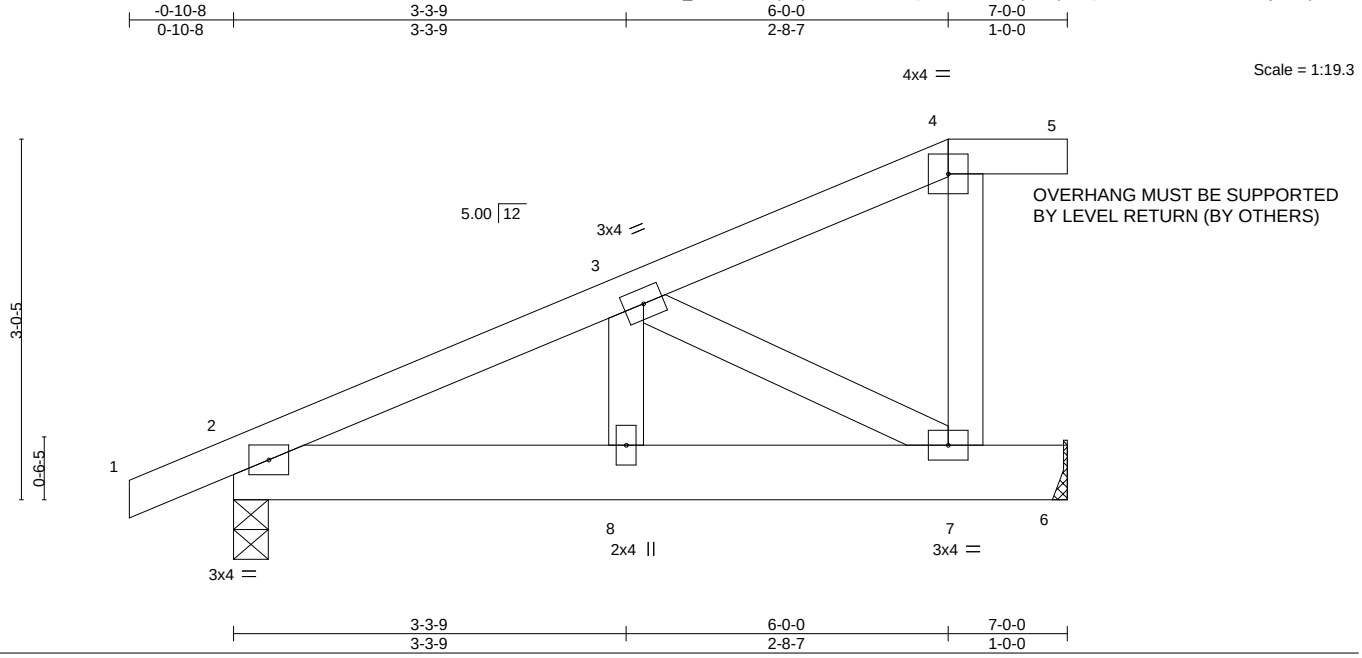

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.02	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.04	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.03	7-8	>999	240	Weight: 38 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=92(LC 8)
Max Uplift 2=-119(LC 4), 6=-308(LC 5)
Max Grav 2=401(LC 1), 6=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-613/177
BOT CHORD 2-8=-197/512, 7-8=-197/512
WEBS 3-8=-153/344, 3-7=-571/219

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=119, 6=308.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 542 lb down and 286 lb up at 6-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-60, 2-6=-20
Concentrated Loads (lb)
Vert: 7=-542(F)

August 11,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	M6	MONOPITCH	4	1	E16033653
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:42:03 2021 Page 1
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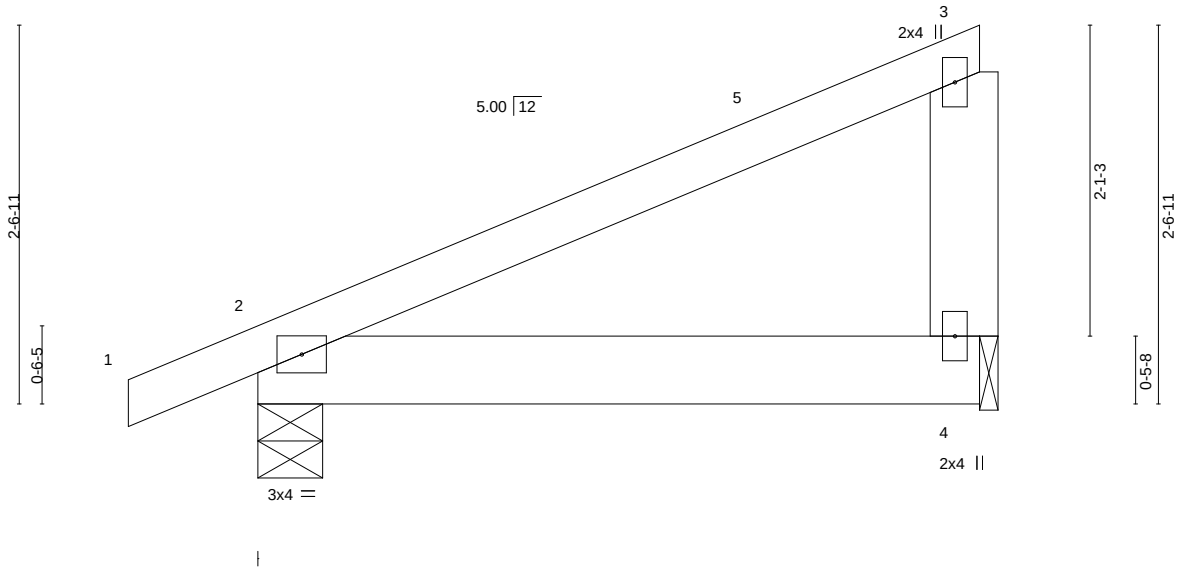

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 25 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-5-4, 4=0-1-8
Max Horz 2=75(LC 12)
Max Uplift 2=-21(LC 8), 4=-34(LC 12)
Max Grav 2=256(LC 1), 4=174(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates Bldg. / 696 Manors @ Lexington
J0721-4255	M6A	MONOPITCH	1	1	E16033654
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 11 14:42:03 2021 Page 1
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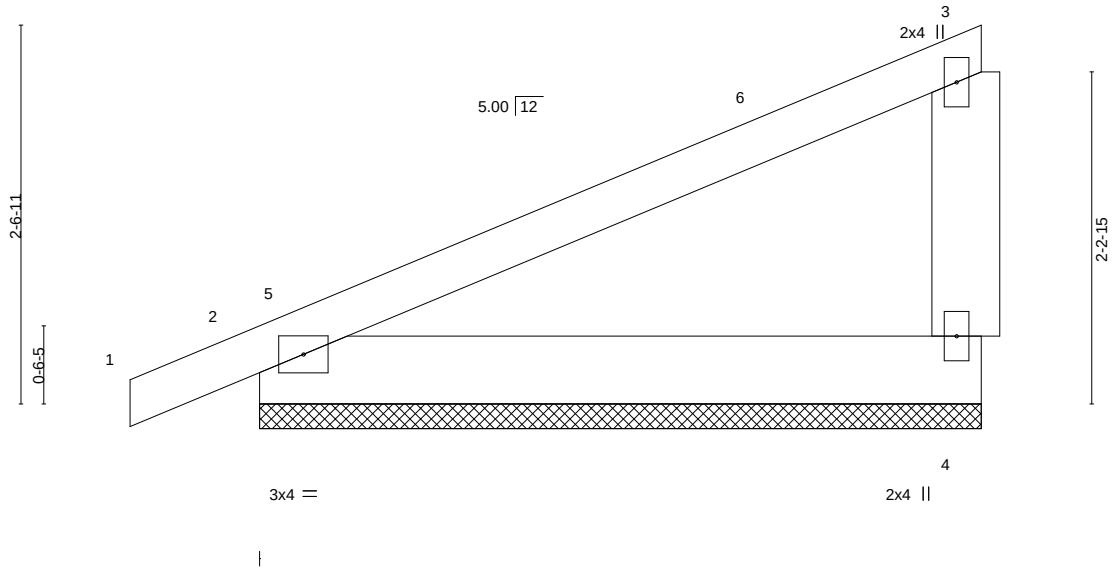

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=4-10-8, 2=4-10-8
Max Horz 2=75(LC 12)
Max Uplift 4=-35(LC 12), 2=-18(LC 12)
Max Grav 4=186(LC 1), 2=248(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.

August 11,2021

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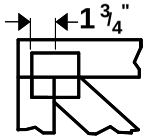
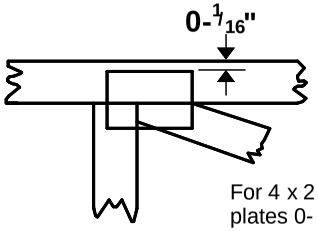
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

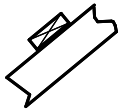
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

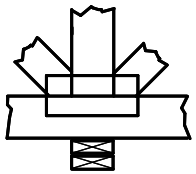
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

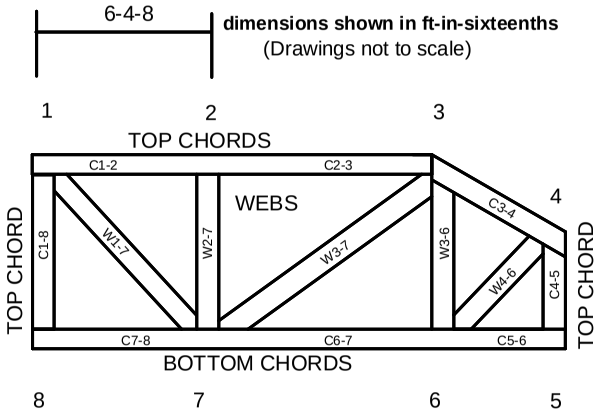


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek
ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.